NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant New Source Review and the Renewal of a Minor Source Operating Permit (MSOP) for Ward Heat Treat in Allen County

MSOP Renewal No.: M003-42063-00263

The Indiana Department of Environmental Management (IDEM) has received an application from Ward Heat Treat, located at 7630 Opportunity Drive, Fort Wayne, Indiana 46825, for a significant new source review and renewal of its MSOP issued on February 11, 2010. If approved by IDEM’s Office of Air Quality (OAQ), this proposed permit would allow Ward Heat Treat to make certain changes at its existing source. Ward Heat Treat has applied to install one (1) new Goff Spin Blast shot blaster (SB4) controlled by one (1) new Farr dust collector (BH-2) and to change their name from Ward Pattern & Engineering, Inc. Heat Treatment Plant to Ward Heat Treat.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

A copy of the permit application and IDEM’s preliminary findings are available at:

Allen County Public Library
900 Library Plaza
Fort Wayne, IN 46802

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

A copy of the preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting,
you would have an opportunity to submit written comments, ask questions, and discuss any air pollution
concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to
IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so
that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you
do not want to comment at this time, but would like to receive notice of future action related to this permit
application, please contact IDEM at the address below. Please refer to permit number M 003-42063-
00263 in all correspondence.

Comments should be sent to:

Michaela Hecox
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Michaela Hecox or (317) 233-3031
Or dial directly: (317) 233-3031
Fax: (317) 232-6749 attn: Michaela Hecox
E-mail: MHecox@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit.
Comments that are most likely to affect final permit decisions are those based on the rules and laws
governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not
have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local
officials.

For additional information about air permits and how the public and interested parties can participate,
refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the
permit has been issued or denied. If the permit is issued, it may be different than the draft permit because
of comments that were received during the public comment period. If comments are received during the
public notice period, the final decision will include a document that summarizes the comments and
IDEM’s response to those comments. If you have submitted comments or have asked to be added to the
mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may
appeal IDEM’s decision, if you disagree with that decision. The final decision will also be available on the
Internet at the address indicated above, at the local library indicated above, and the IDEM public file room
on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana
46204-2251.

If you have any questions, please contact Michaela Hecox of my staff at the above address.

Brian Williams, Section Chief
Permits Branch
Office of Air Quality
DRAFT

New Source Review and Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

Ward Heat Treat
7630 Opportunity Drive
Fort Wayne, Indiana 46825

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

| Operation Permit No.: M003-42063-00263 |
| Master Agency Interest ID: 1457 |
| Issued by: Brian Williams, Section Chief |
| Permits Branch |
| Office of Air Quality |
| Issuance Date: |
| Expiration Date: |
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SECTION A  SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary aluminum castings heat treat plant.

| Source Address: | 7630 Opportunity Drive, Fort Wayne, Indiana 46808 |
| General Source Phone Number: | (260) 426-8700 |
| SIC Code: | 3398 (Metal Heat Treating) |
| County Location: | Allen |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Minor Source Operating Permit Program |
| | Minor Source, under PSD and Emission Offset Rules |
| | Minor Source, Section 112 of the Clean Air Act |
| | Not 1 of 28 Source Categories |

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

(a) Shot blasters:

(1) One (1) Goff Spin Blast shot blaster, identified as SB1, with a maximum steel shot blast rate of 2,323 pounds per hour, equipped with a dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

(2) One (1) Wheelabrator Tumbleblast shot blaster, identified as SB2, with maximum steel shot blast rate of 2,400 pounds per hour, equipped with a dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

(3) One (1) Goff Tumbleblast shot blaster, identified as SB3, with maximum steel shot blast rate of 1,471 pounds per hour, equipped with a dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

(4) One (1) Goff Spin Blast shot blaster, identified as SB4, approved in 2019 for construction, with a maximum steel shot blast rate of 2,323 pounds per hour, equipped with dust collector (DC-2) for particulate control, and exhausting through one (1) stack identified as Stack No.2.

(b) One (1) natural gas fired solution furnace (SF-1), rated at 12.75 million British thermal units per hour (MMBtu/hr), and exhausting through two (2) stacks identified as Stack Nos. 5 and 31.

(c) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu (MMBtu) per hour, including:

(1) One (1) natural gas fired solution furnace (SF-2) rated at 4.5 MMBtu/hr.
(2) Two (2) natural gas fired quench tank heaters (ID Nos. 1 and 3), each rated at 1.5 MMBtu/hr.

(3) Six (6) natural gas fired age ovens (ID Nos. 1 through 6), each rated at 0.5 MMBtu/hr.

(4) Four (4) natural gas fired age ovens (ID Nos. 7 through 10), each rated at 1.0 MMBtu/hr.

(5) One (1) natural gas fired space heater rated at 1.0 MMBtu/hr.

(6) One (1) natural gas fired office heater rated at 0.125 MMBtu/hr.

(7) One (1) natural gas fired water heater rated at 0.04 MMBtu/hr.

(d) Waste sand and recycled sand handling operations using shovel and bucket loader.

(e) Paved and unpaved road and parking lots with public access.

(f) Quenching operations used with heat treating processes.

(g) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower.
SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]
Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]
(a) This permit, M003-42063-00263, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]
Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability
Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability
The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege
This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information
(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

1. Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

2. A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

3. Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

1. Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

2. A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

3. Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee’s control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:
Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]
(a) All terms and conditions of permits established prior to M003-42063-00263 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee’s right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-6.1-7.

B.12 Permit Renewal [326 IAC 2-6.1-7]
(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.15 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee’s premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.
SECTION C  SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards  [326 IAC 2-6.1-5(a)(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.
(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.
C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

1. When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
2. If there is a change in the following:
   (A) Asbestos removal or demolition start date;
   (B) Removal or demolition contractor; or
   (C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the
demolition or renovation will occur for the presence of asbestos pursuant to
40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to
thoroughly inspect the affected portion of the facility for the presence of asbestos. The
requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements  [326 IAC 2-6.1-5(a)(2)]

C.8 Performance Testing  [326 IAC 3-6]
(a) For performance testing required by this permit, a test protocol, except as provided
elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days
prior to the actual test date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later
than forty-five (45) days after the completion of the testing. An extension may be granted
by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation
not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements  [326 IAC 2-1.1-11]

C.9 Compliance Requirements  [326 IAC 2-1.1-11]
The commissioner may require stack testing, monitoring, or reporting at any time to assure
compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any
monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved
by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements  [326 IAC 2-6.1-5(a)(2)]

C.10 Compliance Monitoring  [326 IAC 2-1.1-11]
Compliance with applicable requirements shall be documented as required by this permit. The
Permittee shall be responsible for installing any necessary equipment and initiating any required
monitoring related to that equipment. All monitoring and record keeping requirements not already
legally required shall be implemented when operation begins.

C.11 Instrument Specifications  [326 IAC 2-1.1-11]
(a) When required by any condition of this permit, an analog instrument used to measure a
parameter related to the operation of an air pollution control device shall have a scale
such that the expected maximum reading for the normal range shall be no less than
twenty percent (20%) of full scale. The analog instrument shall be capable of measuring
values outside of the normal range.
(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.
Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, startups or shutdowns of any emission unit or emission control equipment, that results in violations of applicable air pollution control regulations or applicable emission limitations must be kept and retained for a period of three (3) years and be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any emission unit or emission control equipment occurs that lasts more than one (1) hour, the condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification must be made by telephone or other electronic means, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of the occurrence.

(c) Failure to report a malfunction of any emission unit or emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information on the scope and expected duration of the malfunction must be provided, including the items specified in 326 IAC 1-6-2(c)(3)(A) through (E).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
(c) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
Emissions Unit Description:

(a) Shot blasters:

   (1) One (1) Goff Spin Blast shot blaster, identified as SB1, with a maximum steel shot blast rate of 2,323 pounds per hour, equipped with a dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

   (2) One (1) Wheelabrator Tumbleblast shot blaster, identified as SB2, with maximum steel shot blast rate of 2,400 pounds per hour, equipped with a dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

   (3) One (1) Goff Tumbleblast shot blaster, identified as SB3, with maximum steel shot blast rate of 1,471 pounds per hour, equipped with a dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

   (4) One (1) Goff Spin Blast shot blaster, identified as SB4, approved in 2019 for construction, with a maximum steel shot blast rate of 2,323 pounds per hour, equipped with dust collector (DC-2) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

(b) One (1) natural gas fired solution furnace (SF-1), rated at 12.75 million British thermal units per hour (MMBtu/hr), and exhausting through two (2) stacks identified as Stack Nos. 5 and 31.

(c) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu (MMBtu) per hour, including:

   (1) One (1) natural gas fired solution furnace (SF-2) rated at 4.5 MMBtu/hr.

   (2) Two (2) natural gas fired quench tank heaters (ID Nos. 1 and 3), each rated at 1.5 MMBtu/hr.

   (3) Six (6) natural gas fired age ovens (ID Nos. 1 through 6), each rated at 0.5 MMBtu/hr.

   (4) Four (4) natural gas fired age ovens (ID Nos. 7 through 10), each rated at 1.0 MMBtu/hr.

   (5) One (1) natural gas fired space heater rated at 1.0 MMBtu/hr.

   (6) One (1) natural gas fired office heater rated at 0.125 MMBtu/hr.

   (7) One (1) natural gas fired water heater rated at 0.04 MMBtu/hr.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards  [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the following units shall be limited to Pt pounds per MMBtu heat input, as follows:
<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Unit ID</th>
<th>Pt (lb/MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution Furnace</td>
<td>SF-1</td>
<td>0.45</td>
</tr>
<tr>
<td>Solution Furnace</td>
<td>SF-2</td>
<td>0.45</td>
</tr>
<tr>
<td>Quench Tank Heaters</td>
<td>Nos. 1 and 3</td>
<td>0.45</td>
</tr>
<tr>
<td>Age Ovens Nos. 1 through 6</td>
<td></td>
<td>0.45</td>
</tr>
<tr>
<td>Age Ovens Nos. 7 through 10</td>
<td></td>
<td>0.45</td>
</tr>
<tr>
<td>Space Heater</td>
<td>-</td>
<td>0.45</td>
</tr>
<tr>
<td>Office Heater</td>
<td>-</td>
<td>0.45</td>
</tr>
</tbody>
</table>

### D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the shot blasters (SB1, SB2, SB3, and SB4) shall be limited as follows:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Process Weight Rate (tons/hr)</th>
<th>Allowable PM Emissions from 326 IAC 6-3-2 (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB1</td>
<td>1.16</td>
<td>4.52</td>
</tr>
<tr>
<td>SB2</td>
<td>1.20</td>
<td>4.63</td>
</tr>
<tr>
<td>SB3</td>
<td>0.73</td>
<td>3.32</td>
</tr>
<tr>
<td>SB4</td>
<td>1.16</td>
<td>4.52</td>
</tr>
</tbody>
</table>

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

\[E = 4.10 \times P^{0.67}\]

where \(E\) = rate of emission in pounds per hour and \(P\) = process weight rate in tons per hour

### D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and any control device. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

### Compliance Determination Requirements [326 IAC 2-6.1-5(a)(2)]

**D.1.4 Particulate Control**

(a) In order to comply with D.1.2, the dust collectors (DC-1 and DC-2) for particulate control shall be in operation and control emissions from the shot blasters (SB1, SB2, SB3, and SB4) at all times that the units are in operation.

(b) In the event that dust collector failure is observed in a multi-compartment dust collector, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

### Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

**D.1.5 Parametric Monitoring**

The Permittee shall record the pressure drop across the dust collectors (DC-1 and DC-2) used in conjunction with the shot blasters (SB1, SB2, SB3, and SB4), at least once per day when the shot
blasters are in operation. When, for any one reading, the pressure drop across a dust collector is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions and Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.6 Broken or Failed Bag Detection

(a) For a single compartment dust collector controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment dust collector controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the dust collector’s pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.7 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain daily records of the pressure drop across the dust collectors controlling the shot blasters. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
**OFFICE OF AIR QUALITY**
**COMPLIANCE AND ENFORCEMENT BRANCH**
**MINOR SOURCE OPERATING PERMIT**
**ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Ward Heat Treat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Address:</td>
<td>7630 Opportunity Drive</td>
</tr>
<tr>
<td>City:</td>
<td>Fort Wayne, Indiana  46808</td>
</tr>
<tr>
<td>Phone #:</td>
<td>(260) 426-8700</td>
</tr>
<tr>
<td>MSOP #:</td>
<td>M003-42063-00263</td>
</tr>
</tbody>
</table>

I hereby certify that Ward Heat Treat is:  
- [ ] still in operation.  
- [ ] no longer in operation.  

I hereby certify that Ward Heat Treat is:  
- [ ] in compliance with the requirements of MSOP M003-42063-00263.  
- [ ] not in compliance with the requirements of MSOP M003-42063-00263.

<table>
<thead>
<tr>
<th>Authorized Individual (typed):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>Signature:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
</tbody>
</table>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<table>
<thead>
<tr>
<th>Noncompliance:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>


**Malfunction Report**

**Indiana Department of Environmental Management**

**Office of Air Quality**

**Compliance and Enforcement Branch**

Fax Number: (317) 233-6865

---

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

This facility meets the applicability requirements because it has potential to emit 25 tons/year particulate matter, 25 tons/year sulfur dioxide, 25 tons/year nitrogen oxides, 25 tons/year hydrogen sulfide, 25 tons/year total reduced sulfur, 25 tons/year reduced sulfur compounds, 25 tons/year fluorides, 100 tons/year carbon monoxide, 10 tons/year any single hazardous air pollutant, 25 tons/year any combination hazardous air pollutant, 1 ton/year lead or lead compounds measured as elemental lead, or is a source listed under 326 IAC 2-5.1-3(2).

Emissions from malfunctioning control equipment or process equipment caused emissions in excess of applicable limitation.

This malfunction resulted in a violation of: 326 IAC _____ or, permit condition # _____ and/or permit limit of ________

This incident meets the definition of “malfunction” as listed on reverse side? Y N

This malfunction is or will be longer than the one (1) hour reporting requirement? Y N

---

| Company: ________________________________ | Phone No. (_____): __________________________ |
| Location: (City and County): ___________________________________________________________ |
| Permit No.: ____________________ | AFS Plant ID: __________________ | AFS Point ID: __________________ | Inspectors: ____________ |
| Control/Process Device which malfunctioned and reason: ____________________________ | ________________________________________________________________________________ |

Date/Time Malfunction Started: _____/_____/20___ AM/PM

Estimated Hours of Operation with Malfunction Condition: _______________________________________

Date/Time Control Equipment Back-in Service: _____/_____/20___ AM/PM

Type of Pollutants Emitted: TSP, PM-10, SO2, VOC, OTHER: ____________________________________________

Estimated Amount of Pollutant Emitted During Malfunction: _______________________________________

Measures Taken to Minimize Emissions: _______________________________________________________

Reasons Why Facility Cannot Be Shutdown During Repairs:

| Continued Operation Required to Provide Essential Services: _____________________________ |
| Continued Operation Necessary to Prevent Injury to Persons: _____________________________ |
| Continued Operation Necessary to Prevent Severe Damage to Equipment: ____________________ |
| Interim Control Measures: (If Applicable): ____________________________________________ |

Malfunction Reported By: __________________________ Title: __________________________ |

(Signature if faxed)

Malfunction Recorded By: __________________________ Date: __________________________ Time: __________________________

*See Page 2
326 IAC 1-6-1  Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 “Malfunction” definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

*Essential services* are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

________________________________________________________________________
________________________________________________________________________
On October 16, 2019, Ward Heat Treat (formerly Ward Pattern & Engineering, Inc. Heat Treatment Plant) submitted an application to the Office of Air Quality (OAQ) requesting to renew its operating permit. OAQ has reviewed the operating permit renewal application from Ward Heat Treat relating to the operation of a stationary aluminum castings heat treat plant. Ward Heat Treat was issued its first MSOP Renewal (M 003-28535-00263) on February 11, 2010.

**Existing Approvals**

The source was issued MSOP Renewal No. 003-28535-00263 on February 11, 2010. There have been no subsequent approvals issued.

**Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units:

(a) Shot blasters:

1. One (1) Goff Spin Blast shot blaster, identified as SB1, with a maximum steel shot blast rate of 2,323 pounds per hour, equipped with dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

2. One (1) Wheelabrator Tumbleblast shot blaster, identified as SB2, with maximum steel shot blast rate of 2,400 pounds per hour, equipped with a dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

3. One (1) Goff Tumbleblast shot blaster, identified as SB3, with maximum steel shot blast rate of 1,471 pounds per hour, equipped with a dust collector (DC-1) for particulate control, and exhausting through one (1) stack identified as Stack No. 2.

(b) One (1) natural gas fired solution furnace (SF-1), rated at 12.75 million British thermal units per hour (MMBtu/hr), and exhausting through two (2) stacks identified as Stack Nos. 5 and 31.

(c) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu (MMBtu) per hour, including:

1. One (1) natural gas fired solution furnace (SF-2) rated at 4.5 MMBtu/hr.

2. Two (2) natural gas fired quench tank heaters (ID Nos. 1 and 3), each rated at 1.5 MMBtu/hr.

3. Six (6) natural gas fired age ovens (ID Nos. 1 through 6), each rated at 0.5 MMBtu/hr.
(4) Four (4) natural gas fired age ovens (ID Nos. 7 through 10), each rated at 1.0 MMBtu/hr.

(5) One (1) natural gas fired space heater rated at 1.0 MMBtu/hr.

(6) One (1) natural gas fired office heater rated at 0.125 MMBtu/hr.

(7) One (1) natural gas fired water heater rated at 0.04 MMBtu/hr.

d) Waste sand and recycled sand handling operations using shovel and bucket loader.

e) Paved and unpaved road and parking lots with public access.

f) Quenching operations used with heat treating processes.

(g) Blowdown for any of the following: sight glass, boiler, compressors, pumps, and cooling tower.

**Enforcement Issue**

There are no enforcement actions pending.

**Emission Calculations**

See Appendix A of this Technical Support Document for detailed emission calculations.

**County Attainment Status**

The source is located in Allen County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO\textsubscript{2}</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O\textsubscript{3}</td>
<td>Unclassifiable or attainment effective January 16, 2018, for the 2015 8-hour ozone standard.</td>
</tr>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM\textsubscript{2.5} standard.</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>Unclassifiable effective December 13, 2009, for the 2006 24-hour PM\textsubscript{2.5} standard.</td>
</tr>
<tr>
<td>NO\textsubscript{2}</td>
<td>Unclassifiable effective April 15, 2015, for the 2012 annual PM\textsubscript{2.5} standard.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.</td>
</tr>
</tbody>
</table>

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO\textsubscript{x}) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO\textsubscript{x} emissions are considered when evaluating the rule applicability relating to ozone. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO\textsubscript{x} emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM\textsubscript{2.5}

Allen County has been classified as attainment for PM\textsubscript{2.5}. Therefore, direct PM\textsubscript{2.5}, SO\textsubscript{2}, and NO\textsubscript{x} emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants

Allen County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
Fugitive Emissions

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit (326 IAC 2-7) and MSOP (326 IAC 2-6.1) applicability and source status under Section 112 of the Clean Air Act (CAA).

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of Utility Air Regulatory Group v. EPA, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

<table>
<thead>
<tr>
<th>Unrestricted Potential Emissions (ton/year)</th>
<th>PM(^1)</th>
<th>PM(_{10})(^1)</th>
<th>PM(_{2.5})(^{1,2})</th>
<th>SO(_2)</th>
<th>NO(_X)</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
<td>144.72</td>
<td>15.38</td>
<td>15.38</td>
<td>0.07</td>
<td>12.22</td>
<td>0.67</td>
<td>10.27</td>
<td>0.23</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>--</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
</tr>
<tr>
<td>Total PTE of Entire Source Including Source-Wide Fugitives*</td>
<td>145.29</td>
<td>15.52</td>
<td>15.39</td>
<td>0.07</td>
<td>12.22</td>
<td>0.67</td>
<td>10.27</td>
<td>0.23</td>
</tr>
<tr>
<td>MSOP Thresholds</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>&lt; 100</td>
<td>&lt; 25</td>
</tr>
</tbody>
</table>

\(^1\)Under the Part 70 Permit program (40 CFR 70), PM\(_{10}\) and PM\(_{2.5}\), not particulate matter (PM), are each considered as a "regulated air pollutant."

\(^2\)PM\(_{2.5}\) listed is direct PM\(_{2.5}\).

*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed unrestricted potential emissions of the source.
(a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all regulated pollutants is less than 100 tons per year. However, PM is equal to or greater than twenty-five (25) tons per year. The source is not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7. The source will be issued an MSOP Renewal.

---

**Description of Proposed Revision at an Existing Source**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Ward Heat Treat on October 16, 2019, relating to the installation of one (1) new Goff Spin Blast shot blaster (SB4) controlled by one (1) new Farr dust collector (BH-2). The source has also requested a name change from Ward Pattern & Engineering, Inc. Heat Treatment Plant to Ward Heat Treat.

The following is a list of the new emission units and pollution control device(s):

(a) One (1) Goff Spin Blast shot blaster, identified as SB4, approved in 2019 for construction, with a maximum steel shot blast rate of 2,323 pounds per hour, equipped with dust collector (DC-2) for particulate control, and exhausting through one (1) stack identified as Stack No.2.

---

**Permit Level Determination – MSOP Significant Permit Revision**

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the proposed revision. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shotblasting (SB4)</td>
<td>35.37</td>
<td>3.54</td>
<td>3.54</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total PTE Before Controls of the New Emission Units:</td>
<td>35.37</td>
<td>3.54</td>
<td>3.54</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

1PM2.5 listed is direct PM2.5.

Appendix A of this TSD reflects the detailed potential emissions of the proposed revision.

Pursuant to 326 IAC 2-6.1-6(ii)(1)(E), this MSOP is revised through a Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit Revision and the proposed revision involves the construction of new emission units with a potential to emit equal to or greater than twenty-five (25) tons per year of the following pollutants: PM.
Potential to Emit After Issuance

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)</th>
<th>PM 1</th>
<th>PM 10 1</th>
<th>PM 2.5 1,2</th>
<th>SO 2</th>
<th>NOX</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
<td>144.72</td>
<td>15.38</td>
<td>15.38</td>
<td>0.07</td>
<td>12.22</td>
<td>0.67</td>
<td>10.27</td>
<td>0.23</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>--</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
</tr>
<tr>
<td>Total PTE of Entire Source Including Source-Wide Fugitives*</td>
<td>145.29</td>
<td>15.52</td>
<td>15.39</td>
<td>0.07</td>
<td>12.22</td>
<td>0.67</td>
<td>10.27</td>
<td>0.23</td>
</tr>
<tr>
<td>MSOP Thresholds</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>&lt; 100</td>
<td>&lt; 25</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>--</td>
</tr>
<tr>
<td>Emission Offset Major Source Thresholds</td>
<td>---</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>--</td>
</tr>
</tbody>
</table>

1 Under the Part 70 Permit program (40 CFR 70), PM 10 and PM 2.5, not particulate matter (PM), are each considered as a "regulated air pollutant."
2 PM 2.5 listed is direct PM 2.5.

*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed unlimited/uncontrolled emissions of the source.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is not a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Federal Rule Applicability Determination

Due to the proposed revision, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc) are not included in the permit for the natural gas-fired units because they are not steam generating units.

(b) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.
National Emission Standards for Hazardous Air Pollutants (NESHAP):

(a) The requirements of the National Emission Standards for Hazardous Air Pollutants for Nine Metal Fabrication and Finishing Source Categories (40 CFR 63, Subpart XXXXXXX) are not included in the permit, because the source does not use materials that contain or have the potential to emit fabrication or finishing metal HAP, defined as the following HAPs: cadmium, chromium, lead, nickel, or manganese. Additionally, this source is not primarily engaged in any of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

(b) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 63, 326 IAC 14, and 326 IAC 20) included in the permit.

Compliance Assurance Monitoring (CAM):

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

<table>
<thead>
<tr>
<th>State Rule Applicability - Entire Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to this revision, state rule applicability has been reviewed as follows:</td>
</tr>
</tbody>
</table>

326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Potential to Emit After Issuance section of this document.

326 IAC 2-2 (PSD) and 326 IAC 2-3 (Emission Offset)
PSD and Emission Offset applicability is discussed under the PTE of the Entire Source After Issuance of the MSOP Revision section of this document.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of this source will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

1. Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

2. Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Allen County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Allen County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

State Rule Applicability – Individual Facilities

Due to the proposed revision, state rule applicability has been reviewed as follows:

Shot Blasters (SB1, SB2, SB3, SB4)

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(a), the requirements of 326 IAC 6-3-2 are applicable to the four (4) shot blasters (SB1, SB2, SB3, SB4), because each is a manufacturing process not exempted from this rule under 326 IAC 6-3-1(b) and is not subject to a particulate matter limitation that is as stringent as or more stringent than the particulate limitation established in this rule as specified in 326 IAC 6-3-1(c). Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions shall not exceed the pound per hour limits when operating at the process weight rates listed in the table below:

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Process Weight Rate (tons/hr)</th>
<th>PM Emission Limit (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB1</td>
<td>1.16</td>
<td>4.52</td>
</tr>
<tr>
<td>SB2</td>
<td>1.20</td>
<td>4.63</td>
</tr>
<tr>
<td>SB3</td>
<td>0.73</td>
<td>3.32</td>
</tr>
<tr>
<td>SB4</td>
<td>1.16</td>
<td>4.52</td>
</tr>
</tbody>
</table>

The dust collectors (DC-1 and DC-2) shall be in operation at all times the four (4) shot blasters (SB1, SB2, SB3, SB4) are in operation, in order to comply with this emission limit.

The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

\[ E = 4.10 \times P^{0.67} \]

Where:

\( E \) = rate of emission in pounds per hour
\( P \) = process weight rate in tons per hour
Natural Gas Combustion Units

326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-1(d), indirect heating facilities which received permit to construct after September 21, 1983 are subject to the requirements of 326 IAC 6-2-4.

The particulate matter emissions (Pt) shall be limited by the following equation:

\[ Pt = \frac{1.09}{Q^{0.26}} \]

Where:

- Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu).
- Q = Total source maximum operating capacity rating in MMBtu/hr heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility’s permit application, except when some lower capacity is contained in the facility’s operation permit; in which case, the capacity specified in the operation.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Construction Date (Removal Date)</th>
<th>Operating Capacity (MMBtu/hr)</th>
<th>Q (MMBtu/hr)</th>
<th>Calculated Pt (lb/MMBtu)</th>
<th>Particulate Limitation, (Pt) (lb/MMBtu)</th>
<th>PM PTE based on AP-42 (lb/MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution Furnace (SF-1)</td>
<td>1989</td>
<td>12.8</td>
<td>28.5</td>
<td>0.45</td>
<td>0.45</td>
<td>0.002</td>
</tr>
<tr>
<td>Solution Furnace (SF-2)</td>
<td>1989</td>
<td>4.5</td>
<td>28.5</td>
<td>0.45</td>
<td>0.45</td>
<td>0.002</td>
</tr>
<tr>
<td>Quench Tank Heaters (Nos. 1 and 3)</td>
<td>1989</td>
<td>1.5, each</td>
<td>28.5</td>
<td>0.45</td>
<td>0.45</td>
<td>0.002</td>
</tr>
<tr>
<td>Age Ovens (Nos. 1 through 6)</td>
<td>1989</td>
<td>0.5, each</td>
<td>28.5</td>
<td>0.45</td>
<td>0.45</td>
<td>0.002</td>
</tr>
<tr>
<td>Age Ovens (Nos. 7 through 10)</td>
<td>1989</td>
<td>1.0, each</td>
<td>28.5</td>
<td>0.45</td>
<td>0.45</td>
<td>0.002</td>
</tr>
<tr>
<td>Space Heater</td>
<td>1989</td>
<td>1.0</td>
<td>28.5</td>
<td>0.45</td>
<td>0.45</td>
<td>0.002</td>
</tr>
<tr>
<td>Office Heater</td>
<td>1989</td>
<td>0.125</td>
<td>28.5</td>
<td>0.45</td>
<td>0.45</td>
<td>0.002</td>
</tr>
<tr>
<td>Water Heater</td>
<td>1989</td>
<td>0.04</td>
<td>28.5</td>
<td>0.45</td>
<td>0.45</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Where: Q = Includes the capacity (MMBtu/hr) of the new unit(s) and the capacities for those unit(s) which were in operation at the source at the time the new unit(s) was constructed.

Note: Emission units shown in strikethrough were subsequently removed from the source. The effect of removing these units on "Q" is shown in the year the boiler was removed.
326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Liquid and gaseous fuels and combustion air are excluded from the definition of process weight as defined in 326 IAC 1-2-59(a). Therefore, the natural gas-fired combustion units are not subject to the requirements of 326 IAC 6-3-2.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations
The natural gas-fired combustion units are not subject to 326 IAC 326 IAC 7-1.1 because they have a potential to emit (or limited potential to emit) sulfur dioxide (SO2) of less than 25 tons per year or 10 pounds per hour.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Even though, these units were constructed after January 1, 1980, they are not not subject to the requirements of 326 IAC 8-1-6 because their unlimited VOC potential emissions are less than twenty-five (25) tons per year.

326 IAC 9-1 (Carbon Monoxide Emission Limits)
The requirements of 326 IAC 9-1 do not apply to these units because, because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The requirements of 326 IAC 10-3 do not apply to these units, since these units are not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

Waste Sand Handling Operation

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), manufacturing processes with potential emissions less than 0.551 pound per hour are exempt from the requirements of 326 IAC 6-3-2. Therefore, the waste sand handling operation is not subject to the requirements of 326 IAC 6-3-2.

Compliance Determination and Monitoring Requirements

(a) The Compliance Monitoring Requirements applicable to this proposed revision are as follows:

<table>
<thead>
<tr>
<th>Emission Unit / Control Device</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasive Blasters (SB1, SB2, SB3, SB4) / Dust Collector (DC-1) and Dust Collector (DC-2)</td>
<td>Pressure drop monitoring</td>
<td>Daily</td>
<td>Within normal range of 1.0 to 6.0 inches of water, unless a different upper or lower value is established in the most recent compliant stack test</td>
</tr>
</tbody>
</table>

These monitoring conditions are necessary because the dust collectors (DC-1 and DC-2) for the four (4) shot blasters (SB1, SB2, SB3, SB4) must operate properly to assure compliance with 326 IAC 6-3 (Particulate Emissions Limitations for Manufacturing Processes),

Proposed Changes

As part of this permit approval, the permit may contain new or different permit conditions and some conditions from previously issued permits/approvals may have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes.

The following changes were made to conditions contained previously issued permits/approvals (these changes may include Title I changes):
Section A.2 and D.1 have been revised to include the new Shot Blaster (SB4).

(2) 326 IAC 6-2-4 has been incorporated into Section D.1 as it was left out in the past permitting action.

(3) Condition D.1.4 Visible Emission Notations has been removed.

(4) Emission unit descriptions and calculations have been updated to correct past, inaccurate information. There has been no increase in emissions due to these corrections. Emissions were already accounted for in the past permitting action.

### Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on October 16, 2019.

The construction of this proposed revision shall be subject to the conditions of the attached proposed Significant New Source Review and MSOP Renewal No. 003-42063-00263.

The operation of this stationary aluminum castings heat treat plant shall be subject to the conditions of the attached proposed MSOP Renewal No. 003-42063-00263.

The staff recommends to the Commissioner that the Significant New Source Review and MSOP Renewal be approved.

### IDEM Contact

(a) If you have any questions regarding this permit, please contact Michaela Hecox, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 233-3031 or (800) 451-6027, and ask for Michaela Hecox or (317) 233-3031.

(b) A copy of the findings is available on the Internet at: [http://www.in.gov/ai/appfiles/idem-caats/](http://www.in.gov/ai/appfiles/idem-caats/)

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: [http://www.in.gov/idem/airquality/2356.htm](http://www.in.gov/idem/airquality/2356.htm); and the Citizens’ Guide to IDEM on the Internet at: [http://www.in.gov/idem/6900.htm](http://www.in.gov/idem/6900.htm).
## Appendix A: Emission Calculations

### PTE Summary

**Company Name:** Ward Heat Treat  
**Address City IN Zip:** 7630 Opportunity Drive, Fort Wayne, Indiana 46808  
**MSOP Renewal Sig. NSR No.:** 003-42063-00263  
**Reviewer:** Michaela Hecox  
**Date:** 11/19/2019

### Uncontrolled Potential to Emit (tons/yr)

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5 *</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shotblasting (SB1, SB2, SB3, SB4)</td>
<td>144.48</td>
<td>14.45</td>
<td>14.45</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Natural Gas-Fired Furnace (No. 1)</td>
<td>0.16</td>
<td>0.42</td>
<td>0.42</td>
<td>0.03</td>
<td>5.50</td>
<td>0.30</td>
<td>4.62</td>
<td>0.19</td>
</tr>
<tr>
<td>Natural Gas Combustion</td>
<td>0.13</td>
<td>0.51</td>
<td>0.51</td>
<td>0.04</td>
<td>6.73</td>
<td>0.37</td>
<td>5.65</td>
<td>1.27E-01</td>
</tr>
<tr>
<td>Waste Sand Handling</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Excluding Fugitives</strong></td>
<td>144.72</td>
<td>15.38</td>
<td>15.38</td>
<td>0.07</td>
<td>12.22</td>
<td>0.67</td>
<td>10.27</td>
<td>0.23</td>
</tr>
<tr>
<td>Fugitive Emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paved/Unpaved Roads</td>
<td>0.57</td>
<td>0.14</td>
<td>0.01</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Fugitives</strong></td>
<td>0.57</td>
<td>0.14</td>
<td>0.01</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Including Fugitives</strong></td>
<td>145.29</td>
<td>15.52</td>
<td>15.39</td>
<td>0.07</td>
<td>12.22</td>
<td>0.67</td>
<td>10.27</td>
<td>0.23</td>
</tr>
</tbody>
</table>

* PM2.5 listed is direct PM2.5  
**Fugitive HAP emissions are always included in the source-wide emissions

### Potential to Emit after Control (tons/yr)

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5 *</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shotblasting (SB1, SB2, SB3, SB4)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Natural Gas-Fired Furnace (No. 1)</td>
<td>0.15</td>
<td>0.42</td>
<td>0.42</td>
<td>0.03</td>
<td>5.50</td>
<td>0.30</td>
<td>4.62</td>
<td>0.19</td>
</tr>
<tr>
<td>Natural Gas Combustion</td>
<td>0.13</td>
<td>0.51</td>
<td>0.51</td>
<td>0.04</td>
<td>6.73</td>
<td>0.37</td>
<td>5.65</td>
<td>1.27E-01</td>
</tr>
<tr>
<td>Waste Sand Handling</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Excluding Fugitives</strong></td>
<td>0.25</td>
<td>0.93</td>
<td>0.93</td>
<td>0.07</td>
<td>12.22</td>
<td>0.67</td>
<td>10.27</td>
<td>0.23</td>
</tr>
<tr>
<td>Fugitive Emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paved/Unpaved Roads</td>
<td>0.29</td>
<td>0.07</td>
<td>0.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Fugitives</strong></td>
<td>0.29</td>
<td>0.07</td>
<td>0.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Including Fugitives</strong></td>
<td>0.54</td>
<td>1.00</td>
<td>0.94</td>
<td>0.07</td>
<td>12.22</td>
<td>0.67</td>
<td>10.27</td>
<td>0.23</td>
</tr>
</tbody>
</table>

* PM2.5 listed is direct PM2.5
## Appendix A: Emission Calculations

### Modification Summary

**Company Name:** Ward Heat Treat  
**Address City IN Zip:** 7630 Opportunity Drive, Fort Wayne, Indiana 46808  
**MSOP Renewal Sig. NSR No.:** 003-42063-00263  
**Reviewer:** Michaela Hecox  
**Date:** 11/19/2019

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shotblasting (SB4)</td>
<td>35.37</td>
<td>3.54</td>
<td>3.54</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>35.37</td>
<td>3.54</td>
<td>3.54</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Appendix A: Emission Calculations
Abrasive Shot Blasting- SB1, SB2, SB3 & SB4

Company Name: Ward Heat Treat
Address City IN Zip: 7630 Opportunity Drive, Fort Wayne, Indiana 46808
MSOP Renewal Sig. NSR No.: 003-42063-00263
Reviewer: Michaela Hecox
Date: 11/19/2019

<table>
<thead>
<tr>
<th>Blasting Equipment I.D.</th>
<th>Unit</th>
<th>Blast Time Cycle/min</th>
<th>Non-Blast Time Cycle/min</th>
<th>Total Time Cycle/min</th>
<th>Fraction Time Shotblast Feed</th>
<th>blast Cycles/hour</th>
<th>Metal cycles/day</th>
<th>Metal Pounds/cycle</th>
<th>Metal (ton/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(SB1)</td>
<td>Goff 1 - Spin Blast</td>
<td>3.17</td>
<td>4.58</td>
<td>7.75</td>
<td>0.409</td>
<td>7.74</td>
<td>185.81</td>
<td>300</td>
<td>27.87</td>
</tr>
<tr>
<td>(SB2)</td>
<td>Wheelabrator - Tumble Blast</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>0.600</td>
<td>12</td>
<td>288.00</td>
<td>200</td>
<td>28.80</td>
</tr>
<tr>
<td>(SB3)</td>
<td>Goff 2 - Tumble Blast</td>
<td>1.5</td>
<td>2.58</td>
<td>4.08</td>
<td>0.368</td>
<td>14.71</td>
<td>352.94</td>
<td>100</td>
<td>17.65</td>
</tr>
<tr>
<td>(SB4)</td>
<td>Goff 3 - Spin Blast</td>
<td>3.17</td>
<td>4.58</td>
<td>7.75</td>
<td>0.409</td>
<td>7.74</td>
<td>185.81</td>
<td>300</td>
<td>27.87</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Blasting Equipment I.D.</th>
<th>PM pounds/ton Metal</th>
<th>PM10 pounds/ton Metal</th>
<th>Uncontrolled PTE PM tons/yr</th>
<th>Uncontrolled PTE PM10 tons/yr</th>
<th>Control Efficiency</th>
<th>Controlled PTE PM tons/yr</th>
<th>Controlled PTE PM10 tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>(SB1)</td>
<td>17</td>
<td>1.7</td>
<td>35.37</td>
<td>3.54</td>
<td>99.99%</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(SB2)</td>
<td>17</td>
<td>1.7</td>
<td>53.61</td>
<td>5.36</td>
<td>99.99%</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>(SB3)</td>
<td>17</td>
<td>1.7</td>
<td>20.13</td>
<td>2.01</td>
<td>99.99%</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(SB4)</td>
<td>17</td>
<td>1.7</td>
<td>35.37</td>
<td>3.54</td>
<td>99.99%</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>144.48</strong></td>
<td><strong>14.45</strong></td>
<td></td>
<td></td>
<td><strong>0.01</strong></td>
<td><strong>0.00</strong></td>
<td><strong>0.00</strong></td>
</tr>
</tbody>
</table>

The methodologies used to calculate emissions factors are identical to those used in MSOP 003-17250-00263 issued on June 15/2004.
Pleated Filters used in the current and proposed Dust collectors are 99.99% efficient @ 0.5 microns
These emission factors for "Grinding and Cleaning operations" from the FIRE version 6.23 represents the operation at this source

There is no emission factor in AP42 for PM2.5, therefore it is assumed that PM2.5 = PM10

**Methodology:**
Cycles/hour = 60 (min/hr)/(cycle/min)
Total Charge (tons/day) = (1/Total Time (cycle-Min) * 60 (min/hr)) x 24 hr/day x # cycles x (1/2000) (ton/lb)
Controlled PM/PM10 Emissions (ton/yr) = Uncontrolled PM/PM10 Emissions (ton/yr) x (1 - Control Efficiency) * 8760 (hrs/yr) * (1 ton/2000 lbs)
PM and PM10 Emission factors are from FIRE version 6.23 for Gray Iron Foundries, grinding and cleaning operation (SCC # 30400340)
Uncontrolled PM/PM10 Emissions (tons/yr) = Charge Rate (ton/day) x Fraction time shotblasting feed x Emission Factor (lb/ton) x 1/24 (day/hrs) x 8760 (hrs/yr)
Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Ward Heat Treat
Address City IN Zip: 7630 Opportunity Drive, Fort Wayne, Indiana 46808
MSOP Renewal Sig. NSR No.: 003-42063-00263
Reviewer: Michaela Hecox
Date: 11/19/2019

<table>
<thead>
<tr>
<th>Unit</th>
<th>Heat Input Capacity</th>
<th>MMBtu/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution Furnace (SF-1)</td>
<td>12.8</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>1.9</td>
<td>0.10</td>
</tr>
<tr>
<td>PM10*</td>
<td>7.6</td>
<td>0.42</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>7.6</td>
<td>0.42</td>
</tr>
<tr>
<td>SO2</td>
<td>0.9</td>
<td>0.03</td>
</tr>
<tr>
<td>NOx</td>
<td>100</td>
<td>5.50</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5</td>
<td>0.30</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>4.62</td>
</tr>
</tbody>
</table>

**see below

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology
All emission factors are based on normal firing.

MMBTu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBTu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>HAPs - Organics</th>
<th>Emission Factor in lb/MMcf</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>2.1E-03</td>
<td>1.2E-04</td>
</tr>
<tr>
<td>Dichlorobenzene</td>
<td>1.2E-03</td>
<td>6.6E-05</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>7.5E-02</td>
<td>4.1E-03</td>
</tr>
<tr>
<td>Hexane</td>
<td>1.8E+00</td>
<td>9.9E-02</td>
</tr>
<tr>
<td>Toluene</td>
<td>3.4E-03</td>
<td>1.9E-04</td>
</tr>
</tbody>
</table>

| Total - Organics | 0.10 |

<table>
<thead>
<tr>
<th>HAPs - Metals</th>
<th>Emission Factor in lb/MMcf</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>5.0E-04</td>
<td>2.7E-05</td>
</tr>
<tr>
<td>Cadmium</td>
<td>1.1E-03</td>
<td>6.0E-05</td>
</tr>
<tr>
<td>Chromium</td>
<td>1.4E-03</td>
<td>7.7E-05</td>
</tr>
<tr>
<td>Manganese</td>
<td>3.8E-04</td>
<td>2.1E-05</td>
</tr>
<tr>
<td>Nickel</td>
<td>2.1E-03</td>
<td>1.2E-04</td>
</tr>
</tbody>
</table>

| Total - Metals   | 3.9E-04 |

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <10 each

Company Name: Ward Heat Treat
Address City ZIP: 7630 Opportunity Drive, Fort Wayne, Indiana 46808
MSOP Renewal Sig. NSR No.: 003-42063-00263
Reviewer: Michaela Hecox
Date: 11/19/2019

Unit | Heat Input Capacity | MMBtu/hr | Potential Throughput | MMCF/hr | MMCF/yr |
--- | --- | --- | --- | --- | --- |
One (1) Heat Treat Furnace (SF-2) | 4.5 | 15.7 | 1020 | 134.5 |
Two (2) Quench Tank Heaters (ID No. 1 and 3), each rated @ 1.5 MMBtu/hr | 3.0 | 11.4 | 750 | 97.2 |
Six (6) age ovens (ID No. 1 through 6), each rated @ 0.5 MMBtu/hr | 3.0 | 11.4 | 750 | 97.2 |
Four (4) age ovens (ID No. 7 through 10), each rated @ 1.0 MMBtu/hr | 4.0 | 14.8 | 1000 | 134.5 |
One (1) space heater | 1.000 | 3.7 | 2100 | 273.7 |
One (1) office heater | 0.125 | 0.51 | 33 | 4.3 |
One (1) water heater | 0.04 | 0.27 | 18 | 2.3 |

#### Pollutant Emission Factors

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM*</th>
<th>PM10*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factor in lb/MMCF</td>
<td>1.9</td>
<td>7.6</td>
<td>7.6</td>
<td>0.6</td>
<td>100</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Potential Emission in tons/yr = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Methodology
All emission factors are based on normal firing.

**MMBtu = 1,000,000 Btu**

**MMCF = 1,000,000 Cubic Feet of Gas**

Potential Throughput (MMCF/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

**Total HAPs**

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.
Appendix A: Emissions Calculations
Sand Handling

Company Name: Ward Heat Treat
Address City IN Zip: 7630 Opportunity Drive, Fort Wayne, Indiana 46808
MSOP Renewal Sig. NSR No.: 003-42063-00263
Reviewer: Michaela Hecox
Date: 11/19/2019

** conveying / handling **

Waste sand and recycled sand handling operation

The following calculations determine the amount of emissions created by material handling, based on 8,760 hours of use and AP-42, Section 13.2.4, Equation 1. The emission factor for calculating PM emissions is calculated as follows:

PM & PM-10 Emissions:

\[ E = k(0.0032) \times \frac{((U/5)^{1.3})}{((M/2)^{1.4})} \]

where:
- \( k \) = 0.35 (particle size multiplier for <10um)
- \( U \) = 12 mph mean wind speed
- \( M \) = 7.4 material moisture content (%)

\[ E = 5.60E-04 \text{ lb PM-10/ton} \]

\[ E = 1.18E-03 \text{ lb PM/ton} \]

\[ \text{U} = \text{12 mph mean wind speed} \]

\[ \text{M} = \text{7.4 material moisture content (%)} \]

\[ \text{1.1 ton/hr} \times \frac{8,760 \text{ hrs/yr} \times \text{Ef (lb/ton of material)}}{2,000 \text{ lb/ton}} = \text{(ton/yr)} \]

Total PM 10 Emissions: 0.0027 tons/yr
Total PM Emissions: 0.0057 tons/yr

NOTE: There is no emission factor in AP42 for PM2.5, PM 10 = PM2.5
## Emission Calculations

### Fugitive Dust Emissions - Unpaved Roads

#### Company Name:
Ward Heat Treat

#### Address City IN Zip:
7630 Opportunity Drive, Fort Wayne, Indiana 46808

#### MSOP Renewal Sig. NSR No.:
003-42063-00263

#### Reviewer:
Michaela Hecox

#### Date:
11/19/2019

**Unpaved Roads at Industrial Site**

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

**Vehicle Information**

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum trips per day (trip/day)</th>
<th>Maximum Weight of Loaded Vehicle (tons/trip)</th>
<th>Maximum one-way distance (feet/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (miles/day)</th>
<th>Maximum one-way miles (miles/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>2.0</td>
<td>1.0</td>
<td>2.0</td>
<td>30.0</td>
<td>60.0</td>
<td>260</td>
<td>0.049</td>
<td>0.1</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>2.0</td>
<td>1.0</td>
<td>2.0</td>
<td>8.0</td>
<td>24.0</td>
<td>260</td>
<td>0.049</td>
<td>0.1</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>30.0</td>
<td>60.0</td>
<td>260</td>
<td>0.049</td>
<td>0.1</td>
</tr>
</tbody>
</table>

**Totals**

- Average Vehicle Weight Per Trip = 16.8 tons/trip
- Average Miles Per Trip = 0.95 miles/trip

**Unmitigated Emission Factor**, \( Ef = k*[(s/12)^a] * [(W/3)^b] \) (Equation 1a from AP-42 13.2.2)

- \( k = 4.9 \) (lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads))
- \( s = 6.0 \) (mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Iron and Steel Production))
- \( a = 0.7 \) (constant (AP-42 Table 13.2.2-2 for Industrial Roads))
- \( W = 16.8 \) (tons = average vehicle weight)
- \( b = 0.45 \) (constant (AP-42 Table 13.2.2-2 for Industrial Roads))

**Mitigated Emission Factor**, \( E_{ext} = E * [(365 - P)/365] \) (Equation 2 from AP-42 13.2.2)

- \( P = 125 \) days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

**Dust Control Efficiency** = 50% (pursuant to control measures outlined in fugitive dust control plan)

**Methodology**

- **Total Weight driven per day (ton/day)** = \([\text{Maximum Weight of Loaded Vehicle (tons/trip)}] * [\text{Maximum trips per day (trip/day)}]\)
- **Maximum one-way distance (miles/trip)** = \([\text{Maximum one-way distance (feet/trip)}] / [5280 \text{ ft/mile}]\)
- **Maximum one-way miles (miles/day)** = \([\text{Maximum trips per year (trip/day)}] * [\text{Maximum one-way distance (miles/trip)}]\)
- **Average Vehicle Weight Per Trip (tons/trip)** = \(\text{SUM}[\text{Total Weight driven per day (ton/day) / SUM}[\text{Maximum trips per day (trip/day)}]\)
- **Mitigated PTE (Before Control) (tons/yr)** = \([\text{Maximum one-way miles (miles/trip)}] * [\text{Mitigated Emission Factor (lb/mile)}] * (tons/2000 lbs)\)
- **Mitigated PTE (After Control) (tons/yr)** = \(\text{Mitigated PTE (Before Control) (tons/yr)} * (1 - \text{Dust Control Efficiency})\)
Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Ward Heat Treat
Address City IN Zip: 7630 Opportunity Drive, Fort Wayne, Indiana 46808
MSOP Renewal Sig, NSR No.: 003-42063-00263
Reviewer: Michaela Hecox
Date: 11/19/2019

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum number of vehicles per day</th>
<th>Number of one-way trips per day per vehicle</th>
<th>Maximum trips per day (trip/day)</th>
<th>Maximum Weight of Loaded Vehicle (tons/trip)</th>
<th>Total Weight driven per day (ton/day)</th>
<th>Maximum one-way distance (miles/day)</th>
<th>Maximum one-way distance (miles/yr)</th>
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</thead>
<tbody>
<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>2.0</td>
<td>1.0</td>
<td>2.0</td>
<td>30.0</td>
<td>60.0</td>
<td>290</td>
<td>0.055</td>
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<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
<td>8.0</td>
<td>24.0</td>
<td>290</td>
<td>0.055</td>
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<tr>
<td>Vehicle (entering plant) (one-way trip)</td>
<td>14.0</td>
<td>1.0</td>
<td>14.0</td>
<td>2.0</td>
<td>28.0</td>
<td>290</td>
<td>0.055</td>
</tr>
<tr>
<td>Vehicle (leaving plant) (one-way trip)</td>
<td>14.0</td>
<td>1.0</td>
<td>14.0</td>
<td>2.0</td>
<td>28.0</td>
<td>290</td>
<td>0.055</td>
</tr>
</tbody>
</table>

Totals 38.0 224.0 2.1 761.8

Average Vehicle Weight Per Trip = 5.9 tons/trip
Average Miles Per Trip = 0.05 miles/trip

Unmitigated Emission Factor, $E_f = \frac{k \cdot (sL)^{0.91} \cdot W^{1.02}}{VMT}$ (Equation 1 from AP-42 13.2.1)

where $k = \begin{cases} 0.011 & \text{PM} \\ 0.0022 & \text{PM10} \\ 0.00054 & \text{PM2.5} \end{cases}$ (lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1))

$W = \begin{cases} 5.9 & \text{PM} \\ 5.9 & \text{PM10} \\ 5.9 & \text{PM2.5} \end{cases}$ tons = average vehicle weight

$sL = \begin{cases} 9.7 & \text{PM} \\ 9.7 & \text{PM10} \\ 9.7 & \text{PM2.5} \end{cases}$ g/m² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E_{f} \cdot \left[1 - \frac{p}{4N}\right]$ (Equation 2 from AP-42 13.2.1)

where $p = 125$ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)

$N = 365$ days per year

Mitigated Emission Factor, $E_{ext} = \begin{cases} 0.531 & \text{PM} \\ 0.106 & \text{PM10} \\ 0.0281 & \text{PM2.5} \end{cases}$ b/mile

Dust Control Efficiency = 50% 50% 50% (pursuant to control measures outlined in fugitive dust control plan)

<table>
<thead>
<tr>
<th>Process</th>
<th>Mitigated PTE of PM (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM10 (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM2.5 (Before Control) (tons/yr)</th>
<th>Mitigated PTE of PM (After Control) (tons/yr)</th>
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<td>0.00</td>
<td>0.03</td>
<td>0.01</td>
<td>0.00</td>
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</table>

Totals 0.18 0.04 0.01 0.09 0.02 0.00

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight of Loaded Vehicle (tons/trip)] * [Maximum trips per day (trip/day)]

PM = Particulate Matter

Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]

PM10 = Particulate Matter (<10 um)

PM2.5 = Particle Matter (<2.5 um)

Average Vehicle Weight Per Trip (ton/trip) = SUM[Maximum Weight of Loaded Vehicle (tons/trip)] / SUM[Maximum trips per day (trip/day)]

PM2.5 = Particle Matter (<2.5 um)

Average Miles Per Trip (mile/trip) = SUM[Maximum trips per day (trip/day)] / SUM[Maximum one-way distance (miles/trip)]

PM = Particulate Matter

Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/year)] * [Unmitigated Emission Factor (b/mile)] * (ton/2000 lbs)

Mitigated PTE (Before Control) (tons/yr) = [Maximum one-way miles (miles/year)] * [Mitigated Emission Factor (b/mile)] * (ton/2000 lbs)

Mitigated PTE (After Control) (tons/yr) = [Mitigated PTE (Before Control) (tons/yr)] * (1 - Dust Control Efficiency)
December 9, 2019

Rose Fede
Ward Heat Treat
642 Growth Avenue
Fort Wayne, IN 46808

Re: Public Notice
Ward Heat Treat
Permit Level: MSOP Renewal Sig New Srce Rev
Permit Number: 003-42063-00263

Dear Ms. Fede:

Enclosed is a copy of your draft MSOP Renewal with Significant New Source Review, Technical Support Document, emission calculations, and the Public Notice.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/5474.htm

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Allen County Public Library, 900 Library Plaza in Fort Wayne, IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Michaela Hecox, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-3031 or dial (317) 233-3031.

Sincerely,

Theresa Weaver

Theresa Weaver
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 4/12/19
December 9, 2019

To: Allen County Public Library

From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: Ward Heat Treat
Permit Number: 003-42063-00263

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library updated 4/2019
Notice of Public Comment

December 9, 2019
Ward Heat Treat
003-42063-00263

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/5474.htm.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana’s Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.

Enclosure
PN AAA Cover Letter 4/12/2019
## Name and address of Sender

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